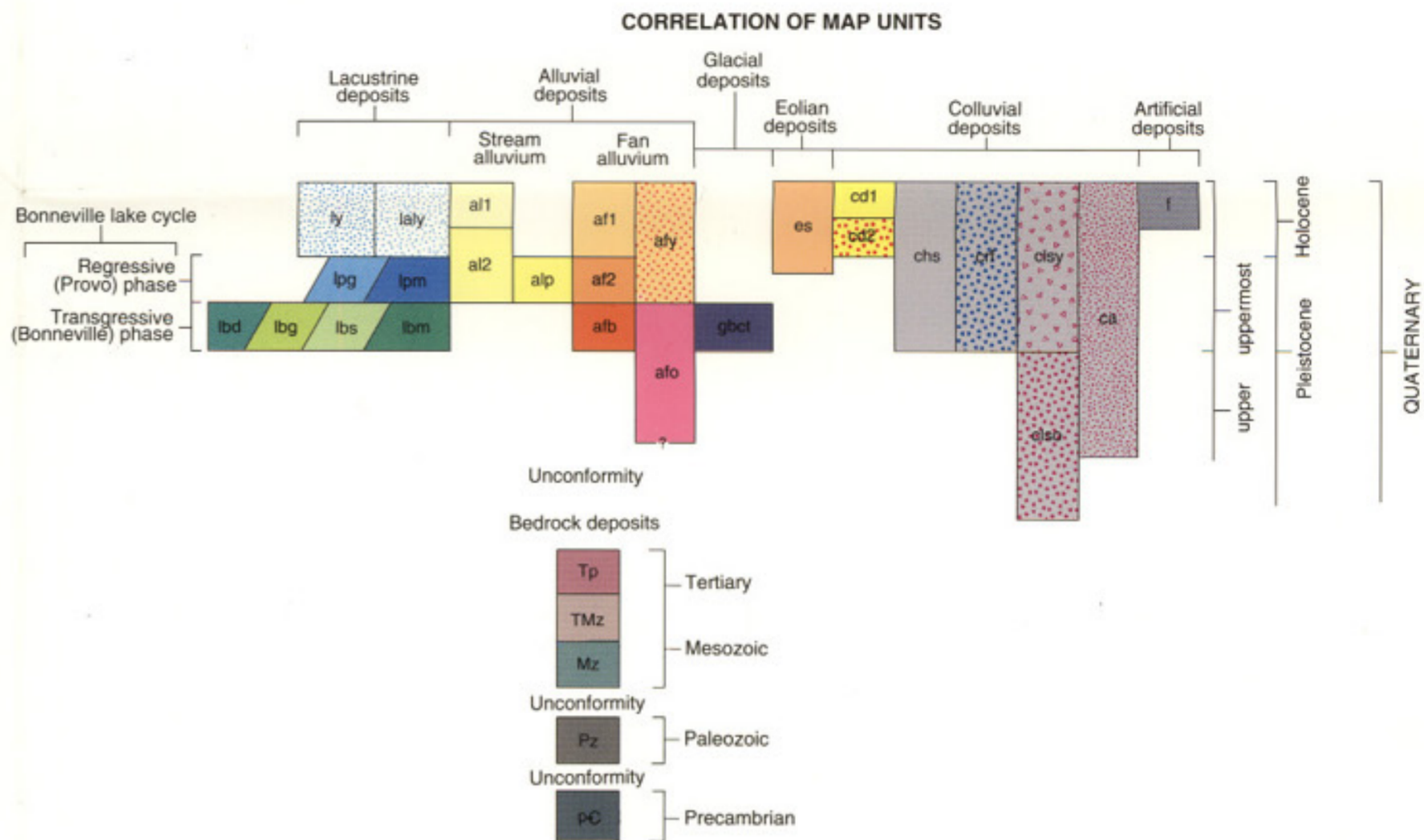


SURFICIAL GEOLOGIC MAP OF THE NEPHI SEGMENT OF THE WASATCH FAULT ZONE, EASTERN JUAB COUNTY, UTAH

by
**Kimm M. Harty, William E. Mulvey,
and Michael N. Machette**
1997

Research supported by the U.S. Geological Survey (USGS), Department of the Interior, under USGS award 1434-93-G-2343 to the Utah Geological Survey. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. Government.

Base map from U.S. Geological Survey, 1:24,000 scale Santaquin (1979), Mona (1979), and Nephi (1983) quadrangles.



DESCRIPTION OF MAP UNITS (see appendix in text pamphlet for detailed descriptions)

LACUSTRINE DEPOSITS

DEPOSITS YOUNGER THAN THE BONNEVILLE LAKE CYCLE (HOLOCENE TO UPPERMOST PLEISTOCENE)

- ly Young lacustrine and marsh deposits
- laly Lacustrine, marsh, and alluvial deposits, undivided

DEPOSITS OF THE PROVO (REGRESSIVE) PHASE OF THE BONNEVILLE LAKE CYCLE (UPPER PLEISTOCENE)

- lpg Lacustrine gravel
- lpm Lacustrine silt and clay

DEPOSITS OF THE BONNEVILLE (TRANSGRESSIVE) PHASE OF THE BONNEVILLE LAKE CYCLE (UPPERMOST PLEISTOCENE)

- lbd Deltaic deposits, primarily sand and gravel
- lbg Lacustrine gravel
- lbs Lacustrine sand
- lbm Lacustrine silt and clay

ALLUVIAL DEPOSITS

DEPOSITS OF STREAM ALLUVIUM

- al1 Stream alluvium, unit 1 (upper Holocene)
- al2 Stream alluvium, unit 2 (middle Holocene to uppermost Pleistocene)
- alp Stream alluvium related to the Provo phase of the Bonneville lake cycle (uppermost Pleistocene)

ALLUVIAL-FAN DEPOSITS

- af1 Fan alluvium, unit 1 (upper Holocene)
- af2 Fan alluvium, unit 2 (middle Holocene to uppermost Pleistocene)
- aty Younger fan alluvium, undivided (Holocene to uppermost Pleistocene)
- atb Fan alluvium related to Bonneville phase of the Bonneville lake cycle (uppermost Pleistocene)
- afo Fan alluvium, undivided (upper to middle Pleistocene; pre-Bonneville lake cycle)

GLACIAL DEPOSITS

- gbct Till of the Bells Canyon advance equivalent (uppermost Pleistocene, Pinedale equivalent)

EOLIAN DEPOSITS

- es Eolian sand and silt (Holocene to uppermost Pleistocene)

COLLUVIAL DEPOSITS

- cd1 Debris flows, unit 1 (upper Holocene)
- cd2 Debris flows, unit 2 (middle Holocene to uppermost Pleistocene)
- chs Hillslope colluvium (Holocene to uppermost Pleistocene)
- rft Rock-fall and talus deposits (Holocene to uppermost Pleistocene)
- olsv Younger landslide deposits (Holocene to uppermost Pleistocene)
- olso Older landslide deposits (upper Pleistocene to upper Tertiary?)
- ca Colluvium and alluvium, undivided (Holocene to middle Pleistocene)

ARTIFICIAL DEPOSITS

- f Artificial fill and associated disturbed ground (historical)

BEDROCK

- Tp Tertiary volcanic and sedimentary rocks (Paleogene)
- TMz Tertiary-Mesozoic sedimentary rocks (Paleogene and Upper Cretaceous)
- Mz Mesozoic sedimentary rocks (Cretaceous to Triassic)
- Pz Paleozoic sedimentary rocks (Permian to Cambrian)
- p-C Precambrian metamorphic rocks (Proterozoic and Archean)

MAP SYMBOLS

- Contact**-Solid where well or approximately located; dotted where concealed.
- Normal fault**-Wasatch fault zone. Bar and ball on down-dropped side. Dashed where approximately located; dotted where concealed.
- Normal fault**-Bar and ball on down-dropped side of bedrock faults (compiled from Witkind and Weiss, 1991). Dashed where approximately located; dotted where concealed.
- Thrust fault**-Sawtooth on overriding plate or block in bedrock only (compiled from Witkind and Weiss, 1991).
- Topographic escarpment**-Escarpments formed by fluvial or lacustrine processes. Where escarpment coincides with the contact between map units, ticks face upslope; dashed where approximately located.
- Landslide escarpment**-Main and minor scarps formed by landsliding; most scarps are mapped within landslide deposits (clay or clso); may coincide with geologic contacts; ticks face downslope; dashed where approximately located.
- Major, continuous, or prominent shorelines related to levels of the Bonneville lake cycle**-May coincide with contact or topographic escarpment.
- Highest shoreline of the Bonneville (transgressive) phase**
- Other shorelines of the Bonneville phase**-Mostly transgressive; dashed where approximately located.
- Fiducial marks**

